

Discovery 2000

Education & Public Outreach

Lessons Learned

July 23rd, 2002



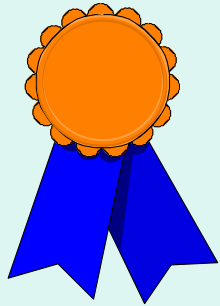
Presented by Dr. Philip Sakimoto
Prepared by Ms. Rosalyn Pertzborn

Overview

The following slides present findings derived from reviews of the Discovery 2000 CSRs as well as E/PO programs proposed for other NASA AOs over the previous year.

Based on the collective findings of all proposals reviewed (AOs and NRAs), there appears to be an emerging trend indicating proposers either understand the requirements for a Very Good to Excellent E/PO program or they don't, with relatively few efforts proposed that could be characterized as average or “in the middle.”

What are we looking for in each of the seven Evaluation Criterion ?



*Characteristics of an
Excellent E/PO Program*



Areas of Concern



Quality, Scope and Realism

- The vision and implementation strategy for the proposed program is thoroughly developed and a comprehensive overview as well as the critical details are presented for the overall E/PO effort.
- There is a clear connection between the mission's science objectives and the educational themes.
- The schedule/timeline logically aligns with key mission milestones and the budget is clearly aligned with specific programs, products and activities.

Quality, Scope and Realism

- Substantial rhetoric with limited detail.
- The E/PO program does not present a clear theme(s) or set of goals and objectives that are linked to the Mission's unique science goals and objectives.
- The proposed level of activity is not appropriately scaled to available budget/resources.

The E/PO Team



Clear evidence of leadership/involvement from the PI, and/or at least one of the Co-Is.

- Demonstrated experience and/or appropriate educational background for key E/PO team members (complementary skills are a plus!).
- Clear lines of authority and responsibility for overall program management and implementation.



The proposed organizational structure and chain of command is unclear or administratively inefficient. The roles and responsibilities of key personnel are unclear or presented inconsistently.

Partnerships



High Leverage Formal and Informal Education partnerships that clearly demonstrate the potential to strengthen the quality of the E/PO program.

- All major partners are identified with responsibilities clearly outlined.
- Detailed letters of commitment that provide sufficient information to adequately assess ability to effectively carry out the work.



Key partnerships lack letters of commitment or provide insufficient detail regarding the role and specific responsibilities of the partner(s).

Evaluation



The evaluation plan is well-designed and has the potential to measure the impact of the overall program as well as specific activities.

- The evaluation technique or approach is appropriate for the program or proposed activity.
- An independent professional evaluation group is identified with an appropriate level of funding allocated in the overall budget.



The evaluation approach/technique is inappropriate for the proposed program, product or activity. External evaluators are not involved and/or the funding level is inadequate.

Alignment with Reform Efforts



There is sufficient detail regarding proposed educational products, materials or activities to demonstrate clear alignment to relevant National Standards in Science, Math, and Technology.

- Teacher Professional Development Standards are recognized and addressed.
- The E/PO program includes team members or partners with significant experience or expertise aligning education programs, products and activities with the standards.



The proposal merely states that “the program will be aligned with National Education Standards.”

Training & Involvement of Underserved/Underutilized Groups



- There is direct involvement and participation of underserved and underutilized groups **across all elements** of the mission.
- The infrastructure and targeted partnerships are in place to involve and impact diverse communities for formal and informal aspects of the E/PO program.
- Proposed products and materials are adapted to address the unique needs and interests of diverse communities and provisions have been made to include active input from those communities.



Limited or marginal involvement of underserved groups.

- Products/activities that are imposed without consideration of the audiences to be served.

Greater Impact Capacity



Education partners are geographically distributed or have a nationally distributed infrastructure in place, and have the potential to reach significant numbers of individuals from underserved communities.

- There is a plan for dissemination of products and materials involving pre-identified audiences.



Broader impact is dependent on a stand-alone website.

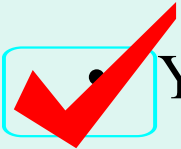
- Vague references to “national dissemination.”

Bottom Line



You will likely do well if you:

- Take the E/PO section seriously.
- Conscientiously follow the guidelines given by the Discovery program and on the OSS Education Homepage.
- Include specifics about plans, budgets, and management at a level parallel to that of the science and technical sections.



You will likely do poorly if you:

- Take the E/PO section lightly.
- Neglect the guidelines.
- Present only vague generalities.